Schary, Claire

From: Keenan, Dru
Sent: Thursday, February 06, 2014 3:56 PM
To: David Primozich
Subject: RE: Crediting Instream Actions

Hi David,

Sorry for the delay in reviewing your summary on the need for a means of valuing the various natural features and process of healthy river system. Thank- you for sending it my way. There certainly is a need for driving the restoration of all of the riverine features and the processes that create them in order to protect aquatic and human beneficial uses, which are the focus of the CWA. You've capture a lot of the important issues/needs. I appreciate your efforts to spur the approach for full restoration of river systems. I just have a couple of thoughts to offer that may aid in conveying/organizing some of the more essential concepts in the summary.

1) Certain pollutants, such as temperature, nutrients, dissolved oxygen, and sediment, are pollutants only when they are out of balance from their naturally occurring state. Further, they are all natural parameters of a river/stream/lake/estuary and exhibit certain spatial and temporal distributions across these waterbodies. (Poole & Dunham et al 2004)

2) These natural parameters, which are the features of habitat, are 'created' by the complex morphological structure and processes, of riverine systems (estuaries/lakes). They need to be viewed and considered at multiple scales – both temporal and spatial.

3) Understanding how land use and anthropogenic activities have altered both the morphology and processes and the alterations created to the spatial and temporal patterns of temperature, etc.(Poole, et al 2001)

4) Fully addressing these pollutants for the protection of aquatic uses requires a comprehensive approach at multiple watershed scales. One that focuses on the processes that form, connect, and sustain the features that regulate the parameters (i.e. temperature) important to healthy aquatic habitat for beneficial uses (i.e. salmon). (Roni, et al 2002)

5) Key to restoration and protection, is to understand how different aquatic species – in all phases of their life history- use the rivers and streams.

Thanks again for letting me review. Keep up the good, hard work!
Best regards,
Dru

From: David Primozich [mailto:primozich@thefreshwatertrust.org]
Sent: Tuesday, January 28, 2014 8:30 PM
To: david.kuszmar@waterboards.ca.gov; Keenan, Dru
Cc: Carrie Leonard
Subject: Crediting Instream Actions

David and Dru, We have prepared a pretty simple summary to get the conversation started around crediting in-stream actions for use in NPDES permits. I think the general concepts outlined here are applicable in northern California, thinking of La Laguna, and certainly in the lower Boise and Mid-Snake in Idaho. I am interested in your thoughts if you care to offer any. I am copying our Director of Science here who is leading the investigation on our end. The purpose of this piece is to get the fundraising conversation started so we can do the science and research needed to build out a site specific relational model that would let us link in-stream changes to specific creditable units of benefits (i.e. phosphorus, sediment, thermal). Hope you are both well. Thanks for taking a moment to review this.

David Primozich
Senior Director of Ecosystem Services
The Freshwater Trust
65 SW Yamhill St, Suite 300
Portland, OR 97204
phone 503.434.8033 I fax 503.435.4911
primozich@thefreshwatertrust.org
www.thefreshwatertrust.org